

Home

Meetings

Members

Officers

Newsletter

E. Iowa DX Bulletin

Buy-Sell-Trade

DXCC Card Checking

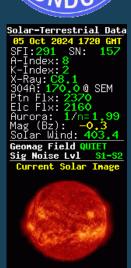
About EIDXA

History

Constitution & Bylaws

DX Resources





The Eastern Iowa DX Bulletin

Number 242, October 4, 2024

Craig Fastenow, KØCF, Editor

This bulletin is a compilation of **currently active** DX operations (or those that will become active within the current week) from recent issues of the three DX bulletins listed below and other sources. Credit for the source is given at the end of each article.

Articles are ordered by the entity's callsign prefix from the *ARRL DXCC Entities List*. Callsigns used are in **bold** with dates of operation highlighted in red. Clickable links are provided for QSL and other information wherever possible. Note that articles may be edited for grammar, language, style and accuracy and will remain in *The Bulletin* while active; articles that are announcements of ongoing operations, or that have no specified end date, will be removed after three weeks.

Also included is a <u>Propagation</u> section, updated daily; and a <u>Contest Calendar</u> of upcoming popular contests.

DX News items are courtesy of:

The ARRL DX Bulletin

The bulletin is available at http://www.arrl.org

425 DX News, A.R.I. DX Bulletin (425DXN)

Edited by Mauro Pregliasco, I1JQJ & Valeria Pregliasco, IK1ADH

425 DX News Home Page: https://www.425dxn.org/

425 DX News Google Group: https://groups.google.com/g/425eng

DX Newsletter (DXNL)

Edited by Andreas Salder, DK5ON

A weekly service of DARC Committee "DX", http://www.darcdxhf.de

Ohio-Penn DX Bulletin (OPDX)

Edited by Tedd Mirgliotta, KB8NW. Although OPDX is no longer published as a weekly bulletin, Tedd still sends DX news emails.

We will occasionally publish some of them.

Propagation data is from:

National Oceanic and Atmospheric Administration's

Space Weather Prediction Center

Dr. Tony Phillips' <u>SpaceWeather.com</u>, used by permission Contest data courtesy of the WA7BNM Contest Calendar

DX News

3D2/R, ROTUMA I. Members of the Rebel DX Group are QRV as **3D2V** and **3D22** until October 30th. Activity is on 160 to 10 meters using primarily FT8 in the SuperFox and MSHV modes. QSL via ClubLog's OQRS.

-[ARRL DX Bulletin # 37 October 3, 2024] (1004-1101)

3V, TUNISIA. Ash, **3V9A**, reports that 3 years after obtaining his callsign he has now received permission to operate from his permanent home. Currently he is active only on 20m (SSB) but hopes

to add more bands later. QSL via <u>LX1NO</u>. -[DXNL # 2425 September 25, 2024] (0927-1018)

- **5H, TANZANIA.** Maurizio, IK2GZU will be active again as **5H3MB** from Tanzania from October 10th to November 11th, while doing volunteer work at a local school. In his spare time, he will operate SSB, CW and digital modes on 80-10 meters. QSL via ClubLog's OQRS, LoTW and eQSL, or via IK2GZU. -[425DXN # 1741 September 14, 2024] (1004-1115)
- **5H, TANZANIA.** Vlad, OK2WX will be active as **5H1WX** from Mafia Island (AF-054), Tanzania from September 18th to October 6th. He will operate CW, SSB and FT8 on 80-10 meters. Detailed QSL policy as well as other information on https://www.mdxc.support/5h1wx/. QSL via ISKHC. -[425DXN # 1733 July 20, 2024] (0913-1011)
- **5R, MADAGASCAR.** Eric, F6ICX will be active again as **5R8IC** from Sainte-Marie Island (AF-090), Madagascar from October until the end of the year. He will operate mainly CW on 40-10 meters; during the last two weeks of December he will also be QRV on the QO-100 satellite. QSL via LoTW, ClubLog's OQRS, or via F6ICX.
- -[425DXN # 1742 September 21, 2024] (0927-0103)
- **5W, SAMOA.** Pete, ZL4TE will be active holiday style as **5WØTE** from Upolu, Samoa (OC-097) on October 3rd-10th. He plans to operate mainly CW on 40, 20 and 10 meters, and "to activate at least one of the POTA parks (more if I get time)". QSL via <u>ClubLog's OQRS</u>, or direct to <u>ZL4TE</u>. -[425DXN # 1741 September 14, 2024] (0927-1011)
- **8Q, MALDIVES.** Francesco, IKØFUX will be QRV as **8Q7UX** from October 6th to 14th. Activity is holiday style on the HF bands using CW and FT8. This may include being an entry in the upcoming Oceania DX CW Contest (October 12th-13th). QSL via IKØFUX, LoTW.
 -[ARRL DX Bulletin # 37 October 3, 2024] (1004-1018)
- **9J, ZAMBIA.** Tom, DL2RMC is currently on a work assignment in Lusaka, Zambia, and has received the callsign **9J2FI**. "Since I am working on a time-consuming project, I won't be very active", he says. "Still, you can hear me in many contests". QSL via <u>DL1RTL</u>.
 -[425DXN # 1743 September 28, 2024] (0927-1018)
- **9X, RWANDA.** Harald, DF2WO will be QRV as **9X2AW** from Kigali from October 9th to 23rd. Activity will be on the HF bands and 6 meters. He will also have equipment for Satellite QO-100. QSL via MØOXO'S OQRS.
- -[ARRL DX Bulletin # 37 October 3, 2024] (1004-1025)
- **A2, BOTSWANA,** Pista, HA5AO is QRV as **A25AO** from Chobe National Park until October 14th. Activity is on 80 to 6 meters using CW, SSB, and FT8. QSL to <u>HA5AO</u>. -[ARRL DX Bulletin # 36 September 26, 2024] (0927-1018)
- **A6, UNITED ARAB EMIRATES.** In recognition of World Space Week, the Emirates Amateur Radio Society will operate special callsign **A6ØWSW** on October 4th-10th. Also expect activity by **A6ØWSW**/ Ø, **A6ØWSW/1**, etc. See https://www.qrz.com/db/A60WSW for the QSL routes for the various suffix extensions. QSL A6ØWSW via EA7FTR. -[425DXN # 1744 October 5, 2024] (1004-1011)
- C2, NAURU. "Out of nowhere, Nauru Airlines cancelled all our confirmed flights due to a change in their flight schedule!", team C21MM reported on August 29th. The new dates for the DXpedition to Nauru (OC-031) are October 10th-29th, and the silver lining is that C21MM will participate in the CQ WW DX SSB Contest (October 26th-27th). The whole group (14 operators) has had to rearrange all flights, including those from Europe to Australia, as well as the accommodation. "These rearrangements produced unexpected additional costs of around 8,000 USD", and they "hope to get special support from the DX community to bring this rare DXCC country on the air". As Phill, C21TS has been quite active on FT8 for more than one year, C21MM will focus on CW on 160-6 meters, as well as SSB and RTTY on several bands. See https://c21mm.mydx.de/ for more information and updates.
- -[425DXN # 1739 August 31, 2024] (1004-1101)

DL, GERMANY. Max **DJ4EL/p** and Joerg **DJ1JB/p** are going to put several locations in the Wadden Sea on the air until October 7th, including Suederoog (EU-042, DID: N-29, Grid: JO44gl) on October 4th. For more information see their qrz.com profiles. QSL via <u>DJ4EL</u> and <u>DJ1JB</u> respectively. -[DXNL # 2426 October 2, 2024] (1004-1011)

DXCC TOP TWENTY. Here are the top 20 entities on ClubLog's "DXCC Most Wanted" list as of October 4. 2024:

```
1. P5
         DPRK (North Korea) 11. ZS8
                                     Prince Edward & Marion Islands
2. BS7H Scarborough Reef 12. KH4
                                     Midway Island
3. CEØX San Felix Islands 13. VKØM Macquarie Island
4. BV9P Pratas Island 14. PYØS
                                     Saint Peter And Paul Rocks
                         15. KP5
5. KH7K Kure Island
                                     Desecheo Island
         Johnston Island 16. VPØS
6. KH3
                                     South Sandwich Islands
7. 3Y/P
         Peter 1 Island
                          17. ZL9
                                     New Zealand Subantarctic Islands
8. FT5/X Kerguelen Island 18. FK/C
                                     Chesterfield Islands
         Aves Island
9. YVØ
                           19. VKØH
                                     Heard Island
10. 3Y/B
        Bouvet Island
                           20. FT/T
                                     Tromelin Island
```

For the complete list, see https://clublog.org/mostwanted.php

-[KØCF October 4, 2024 (1004-1025)

EA, SPAIN. Special callsigns EG3AMCUP (from September 15th to October 14th) and AO3AMCUP (from October 15th to October 28th) will be used by members of URE's Unio de Radioaficionats de Barcelona i Baix Llobregat (EA3MM) during the 37th America's Cup. A certificate will be available, see https://www.ure.es/diploma-cq-americas-cup-2024/ for information. QSL via EA3MM, LoTW, eQSL and QRZ Logbook.

-[425DXN # 1742 September 21, 2024] (0920-1101)

EA, SPAIN. Special event station **EG2AMCUP** is QRV until October 29th during the 37th America's Cup being held in Barcelona. QSL via <u>EA3MM</u>, <u>ClubLog's OQRS</u>, LoTW.
-[ARRL DX Bulletin # 35 September 19, 2024] (0920-1101)

EK, ARMENIA. Artem, R2GEO, operates from Eriwan during his spare time as **EK2/R2GEO** on 20m (SSB, digital). QSL via R2GEO, EA5GL, LoTW.

-[DXNL # 2425 September 25, 2024] (0927-1018)

F, FRANCE. Look for Vic, I2GPT and other three operators to be active as **F/I2GPT** from Sainte Marguerite Island (EU-058) from around 0700 UTC on October 5th until 1400 UTC on October 6th. They will be QRV on 80-10m CW and SSB.

-[425DXN # 1744 October 5, 2024] (1004-1011)

F, FRANCE. Dominique, F5PTI, and other ops will use the callsign **TM5RT** to draw attention to a military jubilee in France from September 29th until October 13th. For other information see qrz.com. OSL via F5PTI.

-[DXNL # 2425 September 25, 2024] (0927-1018)

F, FRANCE. To commemorate the 80th anniversary of the liberation of Wingles during WWII (September 2, 1944), the local radio club (F4KLR) will be active as **TM8ØLW** on August 31st, September 2nd and for another 13 days until November 9th. All SSB and CW QSOs will be confirmed automatically via the bureau and eQSL; FT8 QSOs will be confirmed via eQSL. -[425DXN # 1738 August 24, 2024] (0830-1108)

FO, FRENCH POLYNESIA. Fred, DH5FS will be active as **FO/DH5FS** from French Polynesia from October 4th-23rd as follows:

October 4th-11th Manihi (OC-131)

October 11th-18th Rangiroa (OC-066)

October 18th-23th Tikehau (OC-066)

He will operate CW and FT8 on 20-10 meters. Updates will be posted to

https://mastodon.radio/@dh5fs. QSL via DH5FS.

-[425DXN # 1744 October 5, 2024] (1004-1025)

FR, REUNION I. Stephane, F5UOW will be active holiday style as **FR/F5UOW** from Reunion Island (AF-016) on October 9th-28th. He will operate CW only on 17-10 meters. QSL only via LoTW.

-[425DXN # 1743 September 28, 2024] (1004-1101)

FR, REUNION I. Michal, OM2DX is QRV as TO2DX until October 7th. This includes being an entry in the CQ Worldwide DX RTTY contest (September 28th-29th). QSL to OM2DX.
-[ARRL DX Bulletin # 36 September 26, 2024] (0927-1011)

GM, SCOTLAND. Special event station **GB2ZL** (Scotland) will operate CW only on October 1st-28th to mark the 100th anniversary of the first amateur radio contact between Great Britain and New Zealand (October 18, 1924). See https://www.qrz.com/db/GB2ZL for more information. QSL via LoTW only. -[425DXN # 1742 September 21, 2024] (0927-1101)

HBØ, LIECHTENSTEIN. Ops Roman and Leo will be active as HBØ/DL3TU and HBØ/DL2COM respectively from the end of September to the beginning of October on CW. QSL via DL3TU and DL2COM respectively.

-[DXNL # 2424 September 18, 2024] (0920-1011)

HH, HAITI. Special callsign **4V1SAVANNAH** will be used by the Radio Club d'Haiti to commemorate the 245th anniversary of the Battle of Savannah from September 16th to October 20th. In 1779, more than 500 volunteers from Saint-Domingue (the French colony which later became Haiti), fought alongside American colonial troops against the British Army during the siege of Savannah, an encounter of the American War of Independence. QSOs will be uploaded to ClubLog. QSL via N2OO. -[425DXN # 1740 September 7, 2024] (0913-1018)

HZ, SAUDI ARABIA. Special callsign **HZ9WSW** will be used by the Saudi Amateur Radio Society (HZ1SAR) to promote World Space Week on October 4th-10th. Officially recognized by the United Nations in 1999, World Space Week honors the contributions of science and technology to the betterment of humanity, coinciding with significant milestones in space history: the launch of Sputnik 1 (October 4, 1957), and the signing of the Outer Space Treaty (October 10, 1967).

-[425DXN # 1744 October 5, 2024] (1004-1011)

I, ITALY. Members of ARI Bologna will be active as II4RCDN from October 1st to December 31st. The special callsign marks the 60th Anniversary of the Northern Cross Radio Telescope, one of the largest transit radio telescopes in the world. Gianfranco Sinigaglia (I4BBE, SK), after whom the Bologna ARI Section is named, was a professor of radioastronomy and applied electronics at the Physics Institute of Bologna University, and responsible for the electronics of the Northern Cross. A certificate will be available, see https://www.qrz.com/db/II4RCDN for information. QSL via IZ4FUE.
-[425DXN # 1744 October 5, 2024] (1004-1025)

I, ITALY. Celebrating the 100th anniversary of the start of regular radio broadcasting in Italy (October 6, 1924), ARI local branches across Italy will be using special callsigns from October 1st to December 29th. The callsigns will be in the format II#Rxyz (e.g. II9RCAT for ARI Catania) and IR#Rxyz (e.g. IR1RVDB for ARI Valbormida). In addition, special event station I1MRTV will be active from the RAI Radio and Television Museum in Torino. Certificates and electronic QSLs will be available for download from the HamAward platform (direct link from each special callsign's qrz.com page).

-[425DXN # 1743 September 28, 2024] (0927-1227)

ISØ, SARDINIA. Luca, IK5AEQ will be QRV as ISØ/IK5AEQ on September 26th-28th from POTA sites in the rare province of Oristano on mainland Sardinia (EU-024). Then from September 29th to October 6th he will be active as IMØ/IK5AEQ from San Pietro Island (EU-165). He will operate SSB, RTTY and FT modes on 40-2 meters. QSL via LoTW, ClubLog's OQRS, or via IK5AEQ. -[425DXN # 1742 September 21, 2024] (0920-1011)

J8, ST. VINCENT. Special event call sign **J8AA** is active until January 31, 2025, for contest activity. Look for Franco, J88BTI who will be QRV as J8AA as a Single Op/All Band, except 160 meters, entry in the Oceania DX SSB contest (October 5th-6th). QSL via <u>EA5GL</u>.
-[ARRL DX Bulletin # 37 October 3, 2024] (1004-1025)

JA, JAPAN. Take, JI3DST is active as JS6RRR from Miyako Island (AS-079) until November 25th, including activity during the CQ WW DX SSB and CW contests. Other callsigns to be used are JI3DST/6, JJ5RBH/6 and JR8YLY/6 on CW and SSB, as well as JI3DST/p, JJ5RBH/p and JR8YLY/p

on FT8. QSOs will be made available for ClubLog and LoTW Matching on the IOTA website. -[425DXN # 1744 October 5, 2024] (1004-1129)

JA, JAPAN. Hide, JO1CRA will be active again as **JO1CRA/7** from Oshima (AS-206), Miyagi Prefecture on October 5th-7th. He will operate CW and FT8 on 40, 30, 20, 17, 10 and 6 meters (50303 kHz FT8 as a beacon, QSOs on 50313 or 50303 kHz, plus SSB on 50260 kHz for JA stations). QSL via ClubLog's OQRS, LoTW, or via JO1CRA.

-[425DXN # 1743 September 28, 2024] (1004-1011)

JW, SVALBARD. Look for JW7XK, JW9DL and JW6VM to be active from the Svalbard Amatorradioklubb in Longyearbyen (EU-026) on October 9th-14th. They will participate in the Scandinavian Activity Contest, SSB (October 12th-13th) as JW5X. QSL JW5X via ClubLog's OQRS, LoTW, or via LA5X. QSL JW7XK via LA7XK, ClubLog's OQRS and LoTW. QSL JW9DL via LA9DL and LoTW. QSL JW6VM via LA6VM.

-[425DXN # 1743 September 28, 2024] (1004-1018)

K, UNITED STATES. Mike AB5EB, Mike AD5A, Dragan KØAP and Hector XE2K (AD6D) will be active from two IOTA groups in early October. The plan is for the team to be QRV as **N5D** from Timbalier Island (NA-119) on October 4th-6th, and as **K5M** from Marsh Island (NA-120) on October 7th-8th. The latter operation will be conducted only during the day, due to the restrictions on staying overnight on the island. They will operate SSB, CW and FT8 on 40, 20, 15, 10 and 6 meters.
-[425DXN # 1742 September 21, 2024] (1004-1011)

K, UNITED STATES. Special event stations NØF, N1F, N2F, N3F, N4F, N5F, N6F, N7F, N8F and N9F, plus KF2IRE and VE3FIRE (Canada) will be active on October 6th-12th for the Fire Prevention Week 2024. See https://hamfire.com/ for more information on the event. QSL cards for any of the FPW stations should be sent direct to Fire Prevention Week Special Event, c/o Siemens Fire Safety USA, 2 Gatehall Drive, Parsippany NJ 07054, USA.

-[425DXN # 1743 September 28, 2024] (1004-1011)

OX, GREENLAND. Bo, OZ1DJJ is QRV as **OX3LX** until October 15th. Activity is in his spare time and from Kangerlussuaq, Qaqortoq and Christian IV Island (NA-151). QSL via OZØJ, ClubLog's OQRS and LoTW.

-[ARRL DX Bulletin # 37 October 3, 2024] (1004-1018)

PA, NETHERLANDS. Special callsign PH8ØLIB will be in use from various locations from September 11th until November 10th to commemorate the 80th anniversary of the liberation of southern Netherlands in the autumn of 1944. Activity will be on 80-10 meters SSB, CW and digital modes. See https://www.qrz.com/db/PH80LIB for detailed information. QSL via the bureau. -[425DXN # 1740 September 7, 2024] (0906-1108)

PYØF, FERNANDO DE NORONHA. Ben, DA1DX (ex DL6FBL) and other four operators will be active as **PXØFF** from Fernando de Noronha (SA-003) sometime in October. They will operate CW, SSB and FT8 (MSHV) on 160-6 meters. Updates will be posted to https://www.qrz.com/db/PX0FF. QSL via ClubLog's OQRS, or via DJ4MX.

-[425DXN # 1743 September 28, 2024] (1004-1025)

PZ, SURINAME. While doing training stints in Suriname, **PZ5JT** will be put on the air during October and November by members of the Dutch army as a spare time activity.

-[DXNL # 2425 September 25, 2024] (1004-1122)

SV, GREECE. Dirk, ON5CT will be active as **SV8/ON5CT** from Samos Island (EU-049) until October 6th. He operates SSB, FT8 and RTTY on 80-6 meters. Paper QSLs will not be available, but QSOs will be uploaded to LoTW, eQSL and ClubLog.

-[425DXN # 1741 September 14, 2024] (0913-1011)

SV, GREECE. Special callsign **SX8ØFF** will be used from various locations (including Crete as SV9/SX8ØFF) on October 1st-31st. The purpose of this activity is to honor the 80 fallen Greek firefighters and aerial firefighting crews who lost their lives in the line of duty. QSL via LoTW, eQSL and

QRZ Logbook; paper cards will not be available. -[425DXN # 1743 September 28, 2024] (0927-1101)

T32, E. KIRIBATI. Watch for **T32AZ** during the Oceania DX SSB Contest (October 5th-6th). QSL via KH6QJ.

-[DXNL # 2426 October 2, 2024] (1004-1011)

TU, COTE D'IVOIRE. Mustafa, TA2IMG, a resident in Abidjan since 2016, has now received the callsign **TU5ML**. QRV on 160-6m (SSB, FT8) and via QO-100. QSL via <u>TA2YGT</u> or direct to <u>TU5ML</u>. -[DXNL # 2425 September 25, 2024] (0927-1018)

V4, ST. KITTS & NEVIS. Dale, W4AUV and Bob, K4RLC will be QRV as V4/W4AUV and V4/K4RLC respectively from St. Kitts (NA-104) from October 1st to 12th. Activity will be on 40 meters using CW, and 20 meters QRP CW, respectively, from three POTA sites. QSL via LoTW.
-[ARRL DX Bulletin # 36 September 26, 2024] (0927-1011)

V5, NAMIBIA. A team headed by LA7THA signs **V55LA** from September 30th to October 11th on HF (CW, SSB). QSL via MØOXO'S OQRS.

-[DXNL # 2425 September 25, 2024] (0927-1011)

V5, NAMIBIA. Gunter, DK2WH is QRV as **V51WH** from Omaruru until November 12th. Activity is on 160 to 10 meters, including 60 meters, using SSB, FT8, and possibly CW. He will be active as **V55Y** in various contests. QSL to DK2WH.

-[ARRL DX Bulletin # 35 September 19, 2024] (0920-1115)

VK9N, NORFOLK I. Nick, VK2DX is QRV as **VK9DX** and has been active on 10 meters using SSB around 0845 to 0915z. QSL to <u>VK2DX</u>.

-[ARRL DX Bulletin # 37 October 3, 2024] (1004-1025)

VU, INDIA. Special event station **AT78I** is QRV until November 13th to celebrate 78 years of independence for India. Activity is on the HF bands using CW and SSB. QSL via <u>VU2JOS</u>. -[ARRL DX Bulletin # 31 August 22, 2024] (0823-1115)

YB, INDONESIA. Team **7D4N** will be active from Kemaro Island, Sumatra (OC-143) on October 5th-6th. They will operate SSB, FT8 and RTTY on 40, 20, 15 and 10 meters. QSOs will be uploaded to Club Log and LoTW.

-[425DXN # 1744 October 5, 2024] (1004-1011)

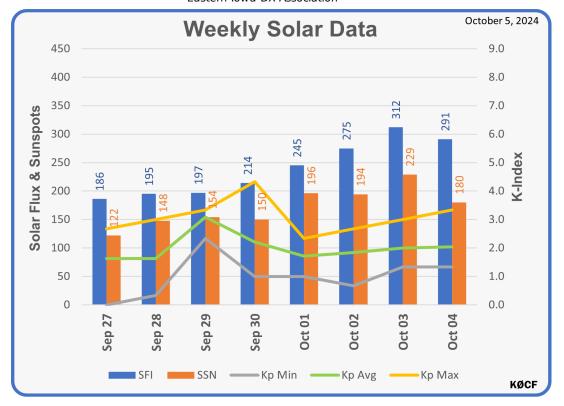
ZD9, TRISTAN DA CUNHA & GOUGH I. Lance, W7GJ, operating as **ZD9GJ** had dismantled and packed all his equipment on September 29th, ready to leave Tristan da Cunha on October 1st. However, adverse sea conditions have delayed his departure. "The forecast for the departure of the MV 'Lance' is now next Wednesday October 10th", he says. "I have decided to instead stay here for an additional 2-1/2 weeks until October 27th and try to return on the little MFV Edinburgh". He is rebuilding the 6m antenna and station.

-[425DXN # 1744 October 5, 2024] (1004-1025)

ZL, NEW ZEALAND. Special event station **ZM1ØØDX** will be QRV from **September 29th to December 26th** to celebrate the very first trans-world QSO between Z4AA and G2SZ. Activity will be on 160 to 6 meters using all modes. In addition, special event station **ZL4AA** will also be active for this event. QSL via operators' instructions.

-[ARRL DX Bulletin # 36 September 26, 2024] (0927-1227)

Propagation (Updated daily)



The Weekly Solar Data chart plots Solar Flux Index (SFI), Sunspot number (SSN) and Planetary K-Index (Kp) for the past 8 days. With 8 Planetary K-index readings each day, only the minimum, average and maximum K-index values are plotted. **Note:** *You may click* here or on the chart above to see the same data for the past month.

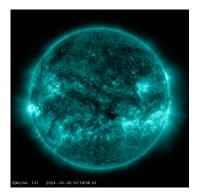
The Daily Solar Flux Index, Sunspot number, Planetary K-index, Solar Flux predictions and Solar Flare data used in this bulletin have been collected by KØCF from from the U.S. Department of Commerce's NOAA Space Weather Prediction Center.

The propagation graphs above are the creations of KØCF and are unique in space weather reporting.

Please Note: The graphs are high resolution .PNG files which you may view in greater detail using your browser's "zoom" feature. Alternatively, right click on the graph and select "Open Image in New Tab" to enlarge it, or "Save Image As..." to save it to your computer for further analysis.

NASA's current view of the Sun at a wavelength of 131 Angstroms. This wavelength shows incredible solar detail.

Click here or on the image to view as a full screen 48-hour video loop. It is fascinating!



Propagation Summary

For the 8 day period from Friday, September 27th through yesterday, October 4th.

The average solar flux was 247, up 75 points from the previous week, with a weekly high of 312 on Thursday, October 3rd, following a low of 186 on September 27th.

The average sunspot count was 179, up 29 from last week, peaking at 229 on Thursday, October 3rd after a weekly low of 122 on September 27th.

The Planetary K-index weekly average was 3.1 with a maximum of 4.3 on Monday, September 30th, resulting in generally quiet geomagnetic conditions. Yesterday's K-index maximum was 3.3 with generally quiet conditions.

Solar flare activity since September 28th has been extremely high with 21 major flares, the largest of which was a **major X 9.0** event on Thursday, October 3rd.

Propagation Data

Major solar flares, Saturday, September 28th through 1242 UTC, October 5th.

#	Date	UTC	Mag.
1	Oct 05	0844	M 1.6
2	Oct 04	2211	M 1.2
3	Oct 04	2104	M 1.1
4	Oct 04	1103	M 1.2
5	Oct 04	0455	M 4.0
6	Oct 04	0017	M 1.2
7	Oct 03	2141	M 2.3
8	Oct 03	2028	M 6.7
9	Oct 03	1218	X 9.0
10	Oct 03	0828	M 1.5
11	Oct 03	0341	M 1.5
12	Oct 03	0234	M 1.1
13	Oct 02	2051	M 3.3
14	Oct 02	1338	M 3.2
15	Oct 02	0624	M 1.1
16	Oct 02	0538	M 3.6
17	Oct 02	0239	M 1.2
18	Oct 01	2220	X 7.1
19	Oct 01	1917	M 1.5
20	Sep 30	2359	M 7.6
21	Sep 29	1424	M 1.7

(NOAA's graph of recent flare activity: GOES-X-Ray-Flux)

From the NOAA Space Weather Prediction Center, here are the probabilities of major solar flares and the predicted 10.7 cm Solar Flux for the next 3 days. NOAA updates this information daily.

Date	M-Flares	X-Flares	Solar Flux	
Oct 5	75%	35%	290	
Oct 6	75%	35%	280	
Oct 7	75%	35%	280	

Looking farther ahead, here is the NOAA Space Weather Prediction Center forecast of 10.7 cm radio flux and maximum Planetary K-index (Kp) for the next 12 days. This data is updated by NOAA every Monday (last updated on September 30, 2024).

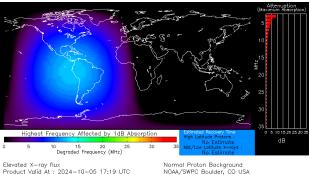
Date	Flux	Кр	
Oct 5	205	4	
Oct 6	205	4	
Oct 7	205	2	
Oct 8	205	2	

Date	Flux	Кр
Oct 9	200	2
Oct 10	185	4
Oct 11	175	5
Oct 12	175	5

Date	Flux	Кр	
Oct 13	175	2	
Oct 14	175	2	
Oct 15	175	2	
Oct 16	175	2	

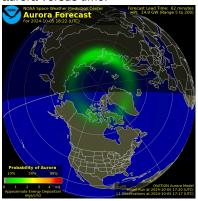
Global D Region Absorption

Conditions in the D-region of the ionosphere have a dramatic effect on HF communications. The D-Region Absorption map combines the effects of solar particles and photons. Yellow to red colors on the map depict increasing signal attenuation, where the bar chart at the right displays attenuation versus frequency. Click the thumbnail below for an animated map of D-Region Absorption:



The Aurora Borealis

The aurora is not only beautiful to see but can have a profound impact on HF and VHF radio propagation. For the HF operator, auroras can result in a complete shut-down of propagation. However, on VHF, auroras present interesting DX possibilities. Beam antennas are very desirable and should be pointed north, towards the aurora. Signals are reflected by "back-scatter" and will be distorted with a rough buzz. SSB is the best voice mode to use, but copy can be difficult. CW will have a rough buzzy sound but be perfectly copyable. Click the thumbnail below for an animated map of aurora versus time:



Highs for Cycle 25

Solar Flux: 336 on August 8, 2024. Sunspots: 382 on August 10, 2024.

Chance of More X-Flares Today

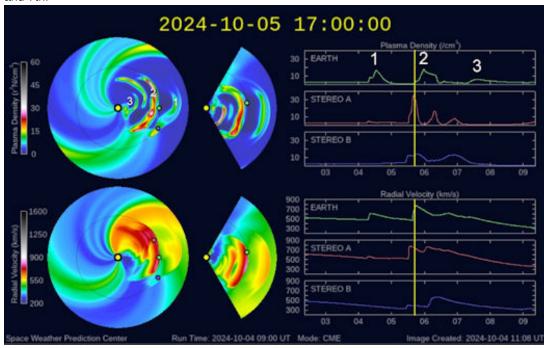
The solar disk is filled with big sunspots. Three of them (3842, 3843, 3848) have unstable "delta-class" magnetic fields that harbor energy for strong solar flares. NOAA forecasters estimate a 75% chance of M-class flares and a 35% chance of X-flares during the next 24 hours.

(Copyright © SpaceWeather.com October 5, 2024. Republished by permission.)

Geomagnetic Storms This Weekend

This week, two powerful X-class solar flares (X7.1 and X9.1) and a series of lesser M-flares hurled CMEs toward Earth. A NOAA model shows three of them hitting or grazing our planet between Oct. 4th

and 7th:



Click to view the animated NOAA model

The <u>most potent CME</u> (#2 in the graphic above) is expected to arrive during the late hours of Oct. 5th (UTC). This could spark a strong <u>G3</u>-class geomagnetic storms with auroras at mid-latitudes. For observers in the USA, this means the night of Oct. 5-6.

The other two CMEs (#1 and #3) are less potent. By themselves they might not cause much of a storm. At this time of year, however, even weak CMEs can be effective due to the autumnal Russell-McPherron effect. The collective effect all three CMEs could therefore cause strong storms throughout the forecast interval.

(Copyright © SpaceWeather.com October 5, 2024. Republished by permission.)

A Propagation Mystery Solved

In QST magazine for October 2024, there is an excellent article by Frank Donovan, W3LPL, about radio propagation during the current Solar Cycle 25 surge. I highly recommend that you find and read this article. It is very informative.

The part of it that I found most interesting is the paragraph titled, "20-Meter Propagation". He explains something that I have been wondering about: Why, when propagation should be great, 20 meters during the day has been terrible. Perhaps you have noticed that as well.

Frank makes it perfectly clear! During the summertime, for a period of several hours either side of local solar noon, the sun is very nearly overhead. This increases the ability of solar radiation to penetrate deeper into the ionosphere, beyond the normal F2 region which provides global DX propagation, and into the E- and even D-layers. These layers are at much lower altitudes and, if strongly ionized, reflect radio signals shorter distances – typically around 1,200-1,300 miles maximum. Under these conditions, signals will be reflected rather than passing through the D- and E-layers, denying access to the F2 layer and global DX.

In fact, you can see the cause of this phenomenon in one of the links that I publish every day in this DX Bulletin: Global D Region Absorption. If you click on this thumbnail (above), a video of the D-Region absorption over the past 8 hours will be available. It is very intriguing to watch the full 8 hours of this video. When the central part of the absorption circle is deep blue, it likely will have minimal effect on 20 meters; however, if it becomes light blue to pale green, 20 meters can be seriously affected, resulting in conditions as described above.

-[Craig Fastenow, KØCF September 25, 2024]

Popular Propagation web sites

https://prop.kc2g.com/ (Excellent Maximum Usable Frequency map) NOAA https://www.swpc.noaa.gov/

https://www.spaceweather.com/

https://www.solarham.com/
https://dx.qsl.net/propagation/

A Propagation Tutorial

The solar X-ray flux tracks solar activity and solar flares. Solar flux, which can vary from as low as 50 to as high as 300, influences the level of ionization in the F2 region of the ionosphere, providing a very good prediction of HF DX conditions. The higher the solar flux, the better conditions will be for the higher HF frequencies and even 6 meters. However, the levels need to be maintained for some days to allow ionization in the F2 layer to build up. A solar flux of 150 results in good HF band conditions, while levels of 200 and up can provide great conditions.

Large X-ray flares on the sun can increase the ionization of the D layer of the ionosphere (a lower layer) on the sunlit side of the Earth, greatly attenuating or blocking HF radio transmissions for up to a half hour. Solar flares often produce Coronal Mass Ejections (CMEs) which, if Earth directed, can lead to geomagnetic storms. Some large flares are also accompanied by strong radio bursts that may interfere with other radio frequencies and cause problems for satellite communication and radio navigation (GPS).

The Planetary K-index is a measure of the magnitude of geomagnetic storms and is an excellent indicator of disturbances in the Earth's magnetic field. A level of 1 or 2 represents quiet geomagnetic conditions; a reading of 3 or 4 may cause some propagation deterioration; 5 and 6 are minor to moderate geomagnetic storms; and 7 to 9 are strong, severe, and extreme storm conditions. Strong geomagnetic storms can trigger Auroral displays and cause HF radio blackouts. Higher geomagnetic activity also has the adverse effect of lowering maximum usable frequencies, much like lower solar flux does.

For best conditions, the solar flux should be above 150 for a few days with the K index below 2. When these conditions are met, some good DX is likely!

-[Compiled from information on NOAA.gov and other sources]

Contest Calendar

Weekly Contests

Contest	Start U	ГС	End	Web Site	
K1USN Slow Speed Test	Monday 00002		0100Z	Rules	
	Monday	1300Z	1400Z		
ICWC Medium Speed Test	Monday	1900Z	2000Z	Rules	
	Tuesday	0300Z	0400Z		
	Wednesday	1300Z	1400Z		
CWone Toet (CWT)	Wednesday	1900Z	2000Z	Dulos	
CWops Test (CWT)	Thursday	0300Z	0400Z	Rules	
	Thursday	0700Z	0800Z		
Weekly RTTY Test	Friday	0145Z	0215Z	Rules	
NCCC CW Sprint (NS)	Friday	0230Z	0300Z	Rules	

Note: Start Days are in UTC, e.g. Monday at 0000 UTC is Sunday at 7:00 PM in the Central Daylight Saving Time zone, or Sunday at 6:00 PM in the Central Standard Time zone.

Full Calendar

Contest	Start		End		Web Site
Oceania DX Contest, Phone	Oct 5	0600Z	Oct 6	0600Z	Rules
California QSO Party	Oct 5	1600Z	Oct 6	2200Z	Rules
Makrothen RTTY Contest	Oct 12	0000Z	Oct 13	1559Z	Rules
Nevada QSO Party	Oct 12	0300Z	Oct 13	2100Z	Rules
Oceania DX Contest, CW	Oct 12	0600Z	Oct 13	0600Z	Rules
Scandinavian Activity Contest, SSB	Oct 12	1200Z	Oct 13	1200Z	Rules
Arizona QSO Party	Oct 12	1500Z	Oct 13	0500Z	Rules
Pennsylvania QSO Party	Oct 12	1600Z	Oct 13	0400Z	Dules
Pennsylvania Q30 Faity	Oct 13	1300Z	Oct 13	2200Z	Rules
South Dakota QSO Party	Oct 12	1800Z	Oct 13	1800Z	Rules
10-10 Int. Fall Contest, CW	Oct 19	0001Z	Oct 20	2359Z	Rules
New York QSO Party	Oct 19	1400Z	Oct 20	0200Z	Rules
Stew Perry Topband Challenge	Oct 19	1500Z	Oct 20	1500Z	Rules
Illinois QSO Party	Oct 20	1700Z	Oct 21	0100Z	Rules
ARRL School Club Roundup	Oct 21	1300Z	Oct 25	2359Z	Rules
CQ Worldwide DX Contest, SSB	Oct 26	0000Z	Oct 27	2400Z	Rules
Ukrainian DX Contest	Nov 2	1200Z	Nov 3	1200Z	Rules
ARRL Sweepstakes Contest, CW	Nov 2	2100Z	Nov 4	0300Z	Rules
WAE DX Contest, RTTY	Nov 9	0000Z	Nov 10	2359Z	Rules
10-10 Int. Fall Contest, Digital	Nov 9	0001Z	Nov 10	2359Z	Rules
JIDX Phone Contest	Nov 9	0700Z	Nov 10	1300Z	Rules
OK/OM DX Contest, CW	Nov 9	1200Z	Nov 10	1200Z	Rules
North American SSB Sprint Contest	Nov 10	0000Z	Nov 10	0400Z	Rules
LZ DX Contest	Nov 16	1200Z	Nov 17	1200Z	Rules
ARRL Sweepstakes Contest, SSB	Nov 16	2100Z	Nov 18	0300Z	Rules
CQ Worldwide DX Contest, CW	Nov 23	0000Z	Nov 24	2400Z	Rules
ARRL 160-Meter Contest	Dec 6	2200Z	Dec 8	1600Z	Rules
ARRL 10-Meter Contest	Dec 14	0000Z	Dec 15	2359Z	Rules
OK DX RTTY Contest	Dec 21	0000Z	Dec 21	2400Z	Rules
Croatian DX Contest	Dec 21	1400Z	Dec 22	1400Z	Rules
ARRL Rookie Roundup, CW	Dec 22	1800Z	Dec 22	2359Z	Rules
RAC Winter Contest	Dec 28	0000Z	Dec 28	2359Z	Rules
Stew Perry Topband Challenge	Dec 28	1500Z	Dec 29	1500Z	Rules

^{-[}Contest data courtesy of the $\underline{\mathsf{WA7BNM}}$ Contest Calendar]

Copyright © IDXA. All rights reserved. For website related questions or comments, please contact the webmaster: k0cf (at) ARRL dot org